Climate Change and Human Health Literature Portal



Does biodiversity improve mental health in urban settings?

Author(s): Dean J, van Dooren K, Weinstein P

Year: 2011

Journal: Medical Hypotheses. 76 (6): 877-880

Abstract:

BACKGROUND: Globally, the human and economic burdens of mental illness are increasing. As the prevalence and costs associated with mental illness rise, we are progressively more aware that environmental issues such as climate change and biodiversity loss impact on human health. HYPOTHESIS: This paper hypothesises that increased biodiversity in urban environments is associated with improved mental health and wellbeing. It proposes the ecological mechanism through which the association may exist, and explores the extant literature to determine the extent of empirical evidence to support our hypothesis. EVIDENCE: While there is a substantial literature investigating the impact of 'green space' and contact with nature on mental health, we identified only one original research paper that directly investigated the link between biodiversity and mental health. This suggests that the extant evidence considers only 'one part of the story', providing an evidence base which is inadequate to inform policy on biodiversity conservation and public health. IMPLICATIONS: Our hypothesised relationship between environmental change and mental health proposes conservation and restoration of biodiversity in urban environments as a form of intervention for improving human health. It also highlights the need for a better evidence base to demonstrate the synergistic benefits of increased biodiversity and mental health to decision makers. Well-designed quantitative epidemiological research is needed to establish the strength of any such causal relationship.

Source: http://dx.doi.org/10.1016/j.mehy.2011.02.040

Resource Description

Exposure: M

weather or climate related pathway by which climate change affects health

Ecosystem Changes

Geographic Feature: M

resource focuses on specific type of geography

Urban

Geographic Location: M

resource focuses on specific location

Global or Unspecified

Health Co-Benefit/Co-Harm (Adaption/Mitigation):

■

Climate Change and Human Health Literature Portal

V

specification of beneficial or harmful impacts to health resulting from efforts to reduce or cope with greenhouse gases

A focus of content

Health Impact: M

specification of health effect or disease related to climate change exposure

Mental Health/Stress

Mental Health Effect/Stress: Other Mental Disorder

Intervention: M

strategy to prepare for or reduce the impact of climate change on health

A focus of content

Mitigation/Adaptation: ™

mitigation or adaptation strategy is a focus of resource

Adaptation

Resource Type: **№**

format or standard characteristic of resource

Review

Resilience: M

capacity of an individual, community, or institution to dynamically and effectively respond or adapt to shifting climate impact circumstances while continuing to function

A focus of content

Timescale: M

time period studied

Time Scale Unspecified